METHOD AND APPARATUS FOR PROVIDING DOMAIN CONVERSIONS FOR MULTIPLE CHANNELS AND APPLICATIONS THEREOF

ABSTRACT OF THE DISCLOSURE

A method and apparatus for domain conversions for multiple channels within a single analog front-end include processing that begins by generating a system clock. The processing continues by converting a frequency of 1st data from a 1st channel frequency to a 2nd channel frequency based on a 1st integer ratio of the system clock. The processing continues by converting the domain of the 1st data rate from a 1st domain to a 2nd domain. The processing continues by converting a frequency of the 2nd data of a 2nd channel from a 2nd channel frequency to the 2nd frequency based on a 2nd integer ratio of the system clock. For example, the rate of the 2nd data may be different than the rate of the 1st but both are converted to the 2nd frequency, which is universally used within the analog front-end. The processing continues by converting the domain of the 2nd data from the 1st domain to the 2nd domain.